

Amendments to the Specification

Please replace para. [0021] with the following amended paragraph.

[0021] The APSM structure 300 may be fabricated by patterning all features (apertures) 402 in the chrome layer 404 on the quartz mask substrate in a first (binary) step, as shown in Figure 4A. This first patterning step may utilize a high precision tool, such as a 50 keV electron beam lithography tool, to print the apertures on the photoresist on the chrome layer. After the binary processing, the mask is recoated with resist 406, and the apertures 408 that are to be quartz etched are then exposed in a second mask patterning step, as shown in Figure 4B. The open apertures ~~404~~ 408 are then etched to 180° phase depth and "converted" to pi apertures. The apertures under the resist remain zero apertures. The resist 406 may then be removed. An isotropic etch step may be used to "hide" the phase edge 410 under the chrome 404, as shown in Figure 4C.

Please replace para. [0022] with the following amended paragraph.

[0022] The requirements for the second mask patterning step (Figure 4B) may be relatively loose, since the resist edges must land on top of the chrome ~~412~~ 404 between the zero and pi apertures, which may be relatively large, e.g., about 200 nm for

a 193 nm lithography system. Since the requirements are more relaxed for the second patterning step, a less precise, and less expensive, tool may be used, such as a laser writer.